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APPLICATION NO.	_	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,664	10/788,664 02/27/2004		Massimiliano Cotterchio	9728.305US01	3624
23552	7590	12/06/2005		EXAMINER	
MERCHA P.O. BOX 2		OULD PC	LOBO, IAN J		
MINNEAPOLIS, MN 55402-0903				ART UNIT	PAPER NUMBER
				3662	

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	10/788,664	COTTERCHIO ET AL.	
Office Action Summary	Examiner	Art Unit	
	lan J. Lobo	3662	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence add	dress
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be tin ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. mely filed n the mailing date of this co ED (35 U.S.C. § 133).	
Status			
Responsive to communication(s) filed on  2a) ☐ This action is FINAL. 2b) ☑ This  3) ☐ Since this application is in condition for alloware closed in accordance with the practice under E	action is non-final.		merits is
Disposition of Claims			
4) ☐ Claim(s) 1-16 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6 and 11-16 is/are rejected. 7) ☐ Claim(s) 7-10 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.		
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the construction of the construct	epted or b) objected to by the drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). pjected to. See 37 CF	` '
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Applicat ity documents have been receiv (PCT Rule 17.2(a)).	ion No ed in this National \$	Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4/05.	4)  Interview Summary Paper No(s)/Mail D 5)  Notice of Informal F 6)  Other:	ate	-152)

Application/Control Number: 10/788,664

Art Unit: 3662

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-6 and 11-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Gelhard ('977).
- 3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Toda et al ('341).

Per claim 1, the patent to Toda et al discloses an apparatus that includes a plurality of transmitter-receiver means (see Figs. 7-9) for emitting acoustic signals in the form of beams rearwardly and for receiving acoustic signals reflected by the fixed structure wherein the number of transmitter-receiver means and the angle of aperture of the respective beams are such that their overall field of view includes substantially all the area behind the stern and wherein each transmitter-receiver includes transducer means operable to convert first input electrical signals into output acoustic signals and to convert reflected acoustic signals into second electrical signals to supply to electronic processing means,

electronic processing means (see Fig. 10A) coupled electrically to the transmitter-receiver means for supplying the said first electrical signals cyclically to the said transducer means, receiving the said second electrical signals converted from

Application/Control Number: 10/788,664

Art Unit: 3662

reflected acoustic signals, and determining the distance between the vessel and the fixed structure on the basis of first and second electrical signals, and

a visual and/or acoustic signaling means (84) coupled to the electronic processing means for producing a visual and/or acoustic signal in real time.

Per claims 2-3, see

Similarly per claim 1, the patent to Gelhard discloses an apparatus that includes a plurality of transmitter-receiver means (see Fig 1, elements 34, 35a, 35b) for emitting acoustic signals in the form of beams rearwardly and for receiving acoustic signals reflected by the fixed structure wherein the number of transmitter-receiver means and the angle of aperture of the respective beams are such that their overall field of view includes substantially all the area behind the stern and wherein each transmitter-receiver includes transducer means operable to convert first input electrical signals into output acoustic signals and to convert reflected acoustic signals into second electrical signals to supply to electronic processing means,

electronic processing means (see Fig. 2) coupled electrically to the transmitterreceiver means for supplying the said first electrical signals cyclically to the said
transducer means, receiving the said second electrical signals converted from reflected
acoustic signals, and determining the distance between the vessel and the fixed
structure on the basis of first and second electrical signals, and

a visual and/or acoustic signaling means (Fig. 2, acoustic indicator) coupled to the electronic processing means for producing a visual and/or acoustic signal in real time.

Application/Control Number: 10/788,664

Art Unit: 3662

Per claims 2-6 and 11-16, see Figs. 1 – 6c of Gelhard.

4. Claims 1-3, 11-13 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by either of the World patents to Gauthier (944) or Manclark ('730).

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of the abovenoted World patents to Manclark or Gauuthier.

Per the rejections (paragraphs 4-6) of the above claims over the Manclark and Gauthier patents, applicants are referred to the International search report filed with the instant application.

#### Allowable Subject Matter

7. Claims 7-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Application/Control Number: 10/788,664 Page 5

Art Unit: 3662

## **Priority**

8. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Italy on March 3, 2003. It is noted, however, that applicant has not filed a certified copy of the Italian application as required by 35 U.S.C. 119(b).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian J. Lobo whose telephone number is (571) 272-6974. The examiner can normally be reached on Monday - Friday, 6:30 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on (571) 272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lan J. Lobo Primary Examiner Art Unit 3662